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ABSTRACT

This handbook includes information, ideas, and methods to help the teacher effectively use community resources in career education and focuses on relationships between curriculum subject areas and careers. Two major sections are included. The first section is a discussion of the role of community resources in career education, covering goals of career education in Washington State, bringing students and their community together, special considerations such as promoting community awareness of career education, and roles and responsibilities of educators. The second section provides teachers with specific guidelines on planning for and using community resources in the K-12 curriculum. Focus is on working with the community resource coordinator, analyzing a subject for careers, analyzing career areas, and conducting an activity using a community resource. Reproducible forms and sample materials mentioned in the guide are included in a related document (CE 014 259). (TA)

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Teachers' Guide

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CE 014 253

Washington State Community Resource System
for Career Education

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The WASHINGTON STATE COMMUNITY RESOURCE SYSTEM FOR CAREER EDUCATION was developed in a special project for the Office of the Superintendent of Public Instruction, by Toner & Associates, Inc., Seattle, Washington with the advice of the Community Support Task Force for Career Education.

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The Community Resource System for Career Education

THE WASHINGTON STATE COMMUNITY RESOURCE SYSTEM FOR CAREER EDUCATION is a compendium of materials including ideas, guidelines and methods that can assist any school or school district in planning and managing a system for involving working adults from the local community in career education activities for students in grades kindergarten through twelve. It is designed to be adaptable to existing programs.

The individual(s) responsible for planning and coordinating the system should receive a package of all the materials listed below, including this Teacher's Guide. Although teachers may not receive all these materials, they should be familiar with them. The materials include:

THE COMMUNITY RESOURCE COORDINATOR'S GUIDE

A handbook including suggestions, guidelines and techniques for use by the individual responsible for coordinating a local community resource system from initial planning and organization through implementation and evaluation.

THE TEACHER'S GUIDE

A handbook including information, ideas and methods to help the teacher effectively utilize community resources in career education. The focus is on relationships between curriculum subject areas and careers. Suggestions concerning activity preparation and responsibilities are included.

THE EVERGREEN PAGES

A statewide directory of information listing statewide resources that may be found in a local school district. Included are suggested formats for organizing a local directory and central file of community resources.

SPECIAL MATERIALS

A series of reproducible forms, samples and worksheets for use by the teacher and Community Resource Coordinator in developing, maintaining, using and evaluating the community resource system.

COMMUNITY RESOURCE PERSON'S GUIDE

A handbook designed to assist community persons to share their resources and career knowledge and experiences with students at all grade levels.

Purpose of the Teacher's Guide

Teachers should be involved in developing a local community resource system, be fully aware of how this system is organized and know how to effectively use these resources in their school's curriculum. This guide provides teachers with an overview of the community resource system suggested in these materials and their role and responsibilities as part of it. It also offers guidelines and suggestions for analyzing careers in various subject areas in preparation for using community resources.

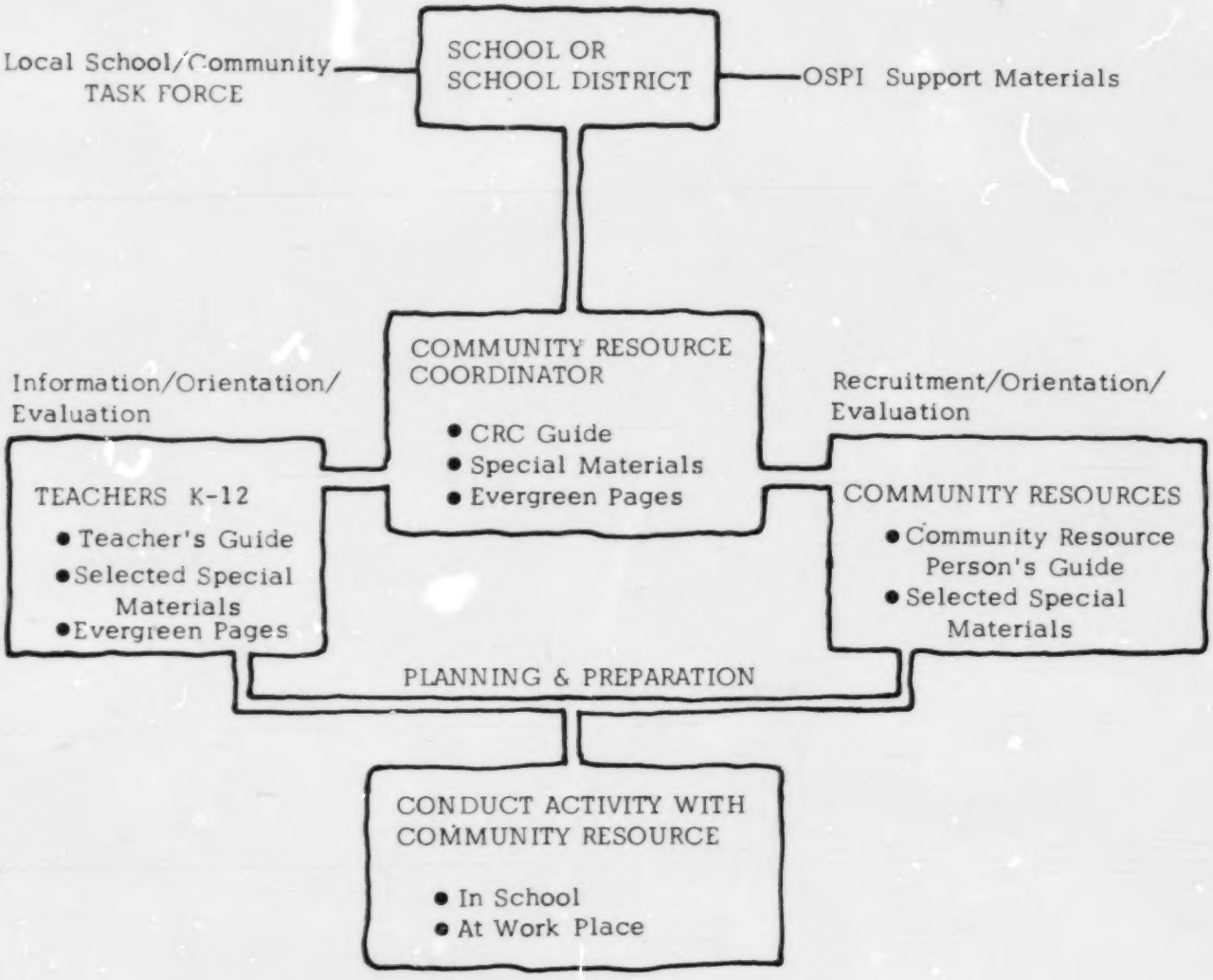
Although the idea of using community resources is not new and many schools presently are using them, this type of program presents some organizational questions for schools:

> Should each teacher spend time to identify and recruit local resources for his or her own use, or can this effort be coordinated so that every teacher has quick access to a local listing or directory of recruited resources in a range of career areas?
>
> Do adults in the community know what is expected of them when working with teachers and students on a career activity?
>
> How can community resource people be provided with orientation and guidelines on how to talk with students about their careers either in schools or at their workplaces?
>
> How can teachers incorporate the use of community resources into their curriculum?
>
> What kinds of legal constraints exist in taking students into workplaces in the community?
>
> What kinds of special activities can teachers conduct with community resources?

This Teacher's Guide addresses these questions. Teachers should work closely with their Community Resource Coordinator in applying the suggestions and information contained in this handbook as they work together to build a system for community resource use. Reproducible forms and sample materials are mentioned in this guide and are included in the Special Materials provided as part of this system.

ELEMENTS OF THE WASHINGTON STATE COMMUNITY RESOURCE SYSTEM

The illustration shown below depicts the key participants and activities within the system and indicates by whom the individual materials are intended to be used.



SOME TERMS USED IN THIS GUIDE

CAREER EDUCATION	*An instructional strategy that blends traditional schoolwork with activities from the world of work. It begins with awareness of self and careers in the elementary years, continues with career explorations in the middle years and extends through the decision-making and skill-developing stage in the high school years when one or more career specialties may be emphasized. (Key elements and outcomes often depicted in career education plans are illustrated on page 8.)*
COMMUNITY RESOURCE COORDINATOR	*A person or persons designated by a school district or districts whose responsibility is to develop and maintain a community resource system that will help teachers primarily through identifying resources teachers can easily access. Duties may include recruitment and orientation of resource persons, operation of the resource system, in-service training for teachers and a variety of related tasks.*
COMMUNITY RESOURCE PERSON	*Any adult who is willing to volunteer time to share information and experiences about a given career area with students.*
FIELD TRIP	*Usually a student group tour of a workplace for the purpose of seeing people perform work roles; emphasizing how school learning is applied in working-world situations.*
HANDS-ON EXPERIENCE	*Carefully defined activities agreed on by community resource persons and school staff that encourage students to practice a basic skill (like geometry) in a real world-of-work task (like sheet metal layout or space vehicle trajectory) in a supervised workplace.*
IN-SCHOOL ACTIVITIES	*Formal and informal presentations by community resource persons in the school for the purpose of relating world-of-work expertise to curriculum. Materials, films and equipment from the workplace are often valuable aids that can be brought into the school by the resource person.*

JOB SHADOWING	*A career exploration activity which enables a student to spend one or more entire workdays with an adult on the job for the purpose of observing many aspects of that occupation during a typical daily cycle.*
VOCATIONAL EDUCATION	*Distinct from career education in that it stresses skill preparation for specific jobs not requiring a college degree, whereas, career education encourages students to consider a broader (or the broadest possible) range of occupational areas. Vocational education serves an important role in career education by helping students prepare for certain careers in well-defined vocational-technical areas.*
WORKPLACE ACTIVITIES	*Include field trips, job shadowing, hands-on experience--any off-campus learning activity where the major purpose is to help students see careers in action and talk to those with experience and expertise in a given occupation. In every case, students are prepared with things to look for and questions to ask.*

The Role of Community Resources in Career Education

"As a result of the process of education, all students should be prepared for their next career steps."

--Goals for Washington Common Schools, Washington State Board of Education, 1972

GOALS OF CAREER EDUCATION IN WASHINGTON STATE

Career education is a direct response to students, parents, educators and the community-at-large who are concerned about the needs of people in today's complex work-oriented society. Through direct experiences with adults and careers, career education helps each student understand the values and expectations they will face in the adult world. Recognizing that a person's satisfaction in a career relates directly to performance as a member of the community and as an individual, career education in Washington schools seeks to provide each student with the attitudes, skills, knowledge and self-awareness necessary to make successful career choices.

Career education relies heavily on the human and physical resources of the community to provide the real world experiences many students want and need. Rather than adding something more to the curriculum, career education offers a context of reality and usefulness within which course content can be presented.

WHAT CAREER EDUCATION OFFERS STUDENTS

These Career Education Elements	*Lead To*	These Career Education Outcomes
1. CAREER AWARENESS--knowledge of the total spectrum of careers	→	1. CAREER IDENTITY--personal identification with the world of work; options remain open for the individual to move among occupations
2. SELF-AWARENESS--knowledge of personal aptitudes, interests and ethical system	→	2. SELF-IDENTITY--self-understanding; consistent value system; ability to make decisions based on individual values
3. APPRECIATIONS, ATTITUDES--life roles; feelings toward self and others in respect to society	→	3. SELF/SOCIAL FULFILLMENT--active work role; satisfying work role; responsibility as citizen
4. DECISION-MAKING SKILLS--applying information to rational processes to reach decisions	→	4. CAREER DECISIONS--career decisions; individual has a plan for career direction; bases decisions on information as distinct from fantasy
5. ECONOMIC AWARENESS--perception of processes in production, distribution and consumption	→	5. ECONOMIC UNDERSTANDING--solve personal and social problems of an economic environment; relate values to compensation, security, growth and related economic measures
6. SKILL AWARENESS AND BEGINNING COMPETENCE--familiarity with employer expectations	→	6. EMPLOYMENT SKILLS--varies from unsophisticated to very sophisticated skills depending upon learner
7. EMPLOYABILITY SKILLS--skills in job-seeking, job-holding, job-advancement	→	7. CAREER PLACEMENT--eventual employment in line with career development plan; affective behavior such as attitudes, coping, self-discipline, integrity are parallel attributes to the specific skill or skills
8. EDUCATIONAL AWARENESS--perception of relationships between education and life roles	→	8. EDUCATIONAL IDENTITY--ability to select educational avenues to develop career plans; decision-making as to post-secondary options, including immediate work, or further education, or both. Awareness of options for continuing education through adulthood

The Washington State Community Resource System is designed to help meet Washington State's goals and objectives for career education. One goal in particular relates to community resources--Item 4.2 of the State of Washington Implementation Plan for Career Education:

> *"Resources of the community, both human and material, will be used to expand the district's capacity for delivering career education to students."*

This goal was clarified by the Office of State Superintendent of Public Instruction in the 1975 Washington Implementation Plan for Career Education. Dr. Frank B. Brouillet, Superintendent of Public Instruction, and the State Career Education Advisory Committee issued the following statements supporting the use of community resources and community involvement in implementing career education in Washington schools:

The Superintendent of Public Instruction (SPI) encourages the development and upgrading of career education programs at the local school district level by providing services and assistance that will:

I. Promote program planning and support, including:

1. *the establishment of local district board commitment to career education*
2. *the development of sound career education management systems*
3. *staff development of teachers, administrators, guidance workers and other special support personnel*
4. *community support for career education programs*
5. *the support of business, industry and labor for career education programs.*

II. Promote the development and utilization of alternate career education delivery systems within the following classifications.

1. *classroom instructional service*
2. *classroom instructional resources*
3. *occupational information guidance services*
4. *self-assessment guidance services*
5. *community resources.*

III. Promote the development and utilization of systems for evaluating career education programs, including:

1. *measurement of program impact on student growth*
2. *review of procedural methods.*

BRINGING STUDENTS AND THE COMMUNITY TOGETHER

What is a Community Resource?

A community resource for career education can be a person in your community willing to volunteer a small amount of time, the actual workplace of that person and the materials and equipment that person uses to do his or her job. Community people, workplaces, materials and equipment help students become aware of many different career choices available to them and see first-hand how things learned in school are applied in the working world. These are special resources that cannot be offered by any single teacher or provided inside the school.

Using Community Resources in Career Education Activities

There are two basic ways that community resources may be used to help students learn: working people from the community may be invited to come into the classroom or school and talk to students about their work, or students may visit workplaces in their community to learn directly from people engaged in various occupations.

In-School Activities. Many people in your community will be willing to volunteer some time to come into your school and participate in a discussion with students about their careers. They may, for example, give a presentation to one group of students or be involved in panel discussions, seminars and career-day activities. Many community resource people are able to bring along sample products, materials or light equipment they use in their jobs. With a little assistance and coordination from teachers, they can relate the particular skills they use in their jobs to the individual academic subjects (English, math, etc.). They can talk about their own education and training and how they got into the job they presently have. The Community Resource Person's Guide is designed to help these resource people prepare an interesting presentation for students. Teachers should be familiar with the contents of this guide, particularly the section, "Your Student Audience and What to Tell Them."

Workplace Activities. There are two general types of activities for students visiting a community resource: field trips or student tours of a workplace (in groups or individually), and career exploration activities, which include student-conducted interviews with and observations of working people, "job shadowing" by an individual student and "hands-on" workplace experience.

- Field trips or student tours are planned visits to any site in the community where people are gainfully employed or engaged in meaningful work. The specific educational purpose is to let students see first-hand what people do for a living and how they do it. The secret of successful field trips and tours is in careful advance planning between teachers and community resource people so both know each other's expectations and desired outcomes for the students.

- Career explorations are for individual students or small groups, generally at the middle or high school levels. The purpose is to help students prepare for their next career steps--career decisions and skill development. Students might spend one or more days touring the workplace, taking photographs, interviewing employees--in general, documenting specific occupations and the people, equipment, resources and products that are part of the occupations.

  A "job shadowing" situation is one in which an individual student might be with a community resource person for one or more full working days. Job shadowing activities should be carefully planned in advance with employers and, when appropriate, union representatives at a site to eliminate any possible questions or concerns before a student begins the activity.

  "Hands-on" experience gives students specific tasks to perform at the workplace as part of a career exploration. The emphasis is educational, however; students do not assume an employee role. The purpose of the experience is to give students a practical basis for making actual career decisions. "Hands-on" activities at the workplace are also used to demonstrate how academic skills are applied in daily work tasks.

Various other school-sponsored programs, including work-study and cooperative education, provide "hands-on" workplace experiences. For these educational experiences, students may receive school credit, pay or a combination of pay and credit. Specific learning activities must be agreed on and all legal and educational requirements met before a student arrives at a site for these kinds of experiences.

Legal Considerations for Workplace Activities

Legal implications for "hands-on" activities require special consideration. Activities that give students "hands-on" experience--particularly in potentially hazardous situations--must meet specific child labor provisions of the Fair Labor Standards Act. You should be familiar with those provisions (see next page).

All "hands-on" activities at workplaces need to be cleared with your district vocational education director or other designated person. If you have any questions about particular workplace activities, contact the U.S. Department of Labor, the Washington State Department of Labor and Industries or, when appropriate, labor union locals in your area for clarification. Community resource people will be counting on you, as their school contact, to know what student workplace activities are possible.

WHAT ARE THE LEGAL LIMITS FOR THE KINDS OF "HANDS-ON" WORKPLACE TASKS A STUDENT CAN DO?

Students may be involved in occupations defined as hazardous if the following conditions are properly met:*

1. the terms of the involvement are spelled out in a written agreement, signed by the employer and school coordinator or principal

2. the involvement is incidental to the student-learner's training

3. the involvement is intermittent, for short periods of time and under the direct and close supervision of a qualified, experienced person

4. safety instructions are given by the school and correlated by the employer with on-the-job training

5. a schedule has been prepared of organized and progressive work processes to be performed on the job

**See "Hazardous Occupations," Exemption II, page 9 of A Guide to Child Labor Provisions of the Fair Labor Standards Act, Child Labor Bulletin No. 101 (revised), 1971. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (20¢).*

WHO ASSUMES RESPONSIBILITY FOR STUDENTS AT THE WORKPLACE?

School districts already involving students in career education experiences in the community may find that their existing district liability policies protect both participating employers and the students engaged in learning activities in the community. Districts are usually liable for student actions and behavior at community sites, but you should verify your district's own provisions for employer and student protection.

Personal injury protection for students may be provided either by the student's own medical and accident coverage as verified by parents or by the district's coverage for students participating in school-related work situations.

SPECIAL CONSIDERATIONS

Experience in career education has shown that there are three major areas of community/school interaction needing constant attention:

- promoting awareness and understanding of the need for career education among citizens in the community
- providing volunteer community resource people with an easy process or system to help them structure their involvement
- understanding legal constraints that some community resource people face (e.g., labor practices and work laws, in providing career experiences for students.

Teachers can help avoid problems in these areas by considering the ideas in this guidebook.

Promoting Community Awareness and Understanding of Career Education

Community awareness can start with the resource recruitment survey your district may have already conducted. Teachers should also be involved on a task force comprised of school and community members which will help develop and maintain the program. Every available opportunity should be used to explain the purposes of career education and how world-of-work resources can help.

Providing Community Resource People With an Easy Process

Community resource people need to understand what their role should be--what kinds of interaction with students are desired and expected. They need to be protected from unreasonable demands made through oversight or lack of coordination.

They need support and encouragement in what, for many of them, is a new experience. The Community Resource Person's Guide provides both a general introduction to career education and a guide to working with students both in classroom visits and at workplaces. There are detailed suggestions for how to talk about careers with students of all ages. (This guide is also must reading for teachers.)

Promoting Teacher Sensitivity to Community Constraints

Resource people occasionally operate under constraints which teachers may not understand. Teachers should be aware, for instance, that labor union representatives and shop stewards should be directly involved in planning student experiences at union shops. All resource people operate under time constraints which the teacher and students need to respect.

The Community Resource Person's Guide will provide teachers with many suggestions on how to deal sensitively with the community.

ROLES AND RESPONSIBILITIES OF EDUCATORS

Initiating a system for community resource use requires a partnership approach from the very beginning. The system will need active support from the community, the school board, the school administration, the teachers and the students. The outlines of the roles which follow suggest examples of functions these individuals and groups can/might perform.

The Role of the School Board and School Administration

It is very important, in building a coordinated effort utilizing resources, to have the firm support of the school board and both school and district administration. School boards represent the community's involvement in every dimension of education. They establish policies and give assistance that is responsible to both school and community interests.

TYPICAL SCHOOL BOARD RESPONSIBILITIES

1. Establish policy guidelines for both career education and use of community resources
2. Prioritize funds to assist teacher use of community resources and career education programs
3. Encourage community participation and support through public meetings, formation of a school/community career education task force, statements in the local media and personal contacts

Equally important is the commitment of school administrators to a coordinated effort. Key decisions must be made at this level to facilitate school board policies and provide the framework for using community resources in the school curriculum.

TYPICAL SCHOOL ADMINISTRATION RESPONSIBILITIES

1. Define and clarify policies relating to community resource utilization
2. Help with community relations and recruitment of resources
3. Provide for a Community Resource Coordinator or similar position
4. Encourage use of community resources by teachers to fulfill district career education goals
5. Maintain liaison with local and state agencies that might assist the schools with funding support, information sharing or resources of their own
6. Insure, as necessary, that local practices are in compliance with state education guidelines on career education and community involvement

The Role of the School/Community Resource Task Force

Perhaps one of the most productive ways to establish and maintain a good relationship between school personnel and the community is through the work of a school/community task force. This task force should include teachers, counselors and career education coordinators as well as community resource people representing as many of the various career areas as possible and with representation from business and labor.

POSSIBLE ROLES FOR THE TASK FORCE

1. Assist in developing and implementing a community resource system
2. Help identify and gain the participation of community resources in each occupational cluster
3. Participate in curriculum development for career education programs
4. Host (and/or help plan) orientation and training workshops for community resources who wish to become involved in career education programs
5. Assist in gaining school board and parental commitment to career education programs

The Role of the Teacher

The teacher's role is fundamental to successful use of community resources. Teachers can initiate and follow through on various plans for community resource use as can paraprofessionals and older students working as classroom assistants.

TYPICAL TEACHER RESPONSIBILITIES

1. Understand and implement district policies and career education goals concerning the use of community resources
2. Inspect course outlines and curriculum objectives for ways to incorporate community resources and add the dimension of career development to specific learning plans
3. Know procedures in your school and district for identifying and using community resources
4. Prepare students ahead of time and arrange for related follow-through activities
5. Be aware of alternative resources you might use if the ones you had planned on using are unavailable
6. Be alert to important general concerns such as respecting union constraints in community resource use and eliminating race and sex role stereotyping in career guidance
7. Brainstorm ideas with other teachers about possible ways to streamline the uses of resources and combine efforts to achieve interdisciplinary learning activities
8. Participate in community resource training sessions offered by your district

The Role of Students

While older students can have significantly more input during the development of community resource activities than younger students, all students can play an important part in ongoing evaluation and resource recruitment. Teachers should encourage students to ask for resources they are especially interested in using, make certain they know that the program is based on their participation and relies on their evaluation and input to be useful, and provide opportunities for students with initiative and responsibility to help with other aspects of the program, such as being a student helper during the initial survey process or helping to plan a special career-related function. All students should be encouraged to be as involved as possible, since their support of the program will be strongest if they feel it is indeed partly their program.

TYPICAL STUDENT RESPONSIBILITIES

1. Suggesting resources they are interested in using, either general--like aerospace--or specific--such as a flight controller
2. Participate in individual and/or group preparation for each activity
3. Fill out evaluation forms after each resource use to help instructors make the most effective use of resources
4. Participate in planning and implementing follow-through activities
5. Think critically about their own interests, needs and goals as they relate to career development and decisions.

SPECIAL STUDENT RESPONSIBILITIES

1. Help build master list of potential resources during the preliminary planning phase
2. Help with survey implementation by making follow-up phone calls to resources, tabulating data or participating in other supervised school-based functions
3. Help plan special activities.

Teachers' Guidelines: How to Plan For and Use Community Resources in the K-12 Curriculum

WORKING WITH THE COMMUNITY RESOURCE COORDINATOR

Your school or district has set the stage for weaving community resources into career education. Now what's the teacher supposed to do? The answer involves more than just using the system. Rather, your role is to help keep the system moving. Tips in this section are designed to point out the kinds of things you can do and the ways you can work with other people to make sure the right resources are used to meet the right objectives at the right time.

- First, find out who is coordinating the system in your building or school.
- Find out how you can help. Actual recruitment of resource persons may be someone else's responsibility, but perhaps you have some names to suggest.
- Check to see if some of the following suggested forms and ideas will help. They are included in a Special Materials collection your Community Resource Coordinator should have:

  Career Education Parent Permission Slip
  Audience Information Form
  Student Pre-Interview Checklist
  Junior/Senior High Student Interview Form
  Sample Evaluation Questions for Elementary Students
  Teacher Evaluation of Resource Person Presentation
  Secondary Student Evaluation of Resource Person Presentation
  Resource Person's Evaluation of School Involvement
  Teacher's Self-Evaluation Checklist
  Subject Worksheets

Your most important task is to determine/establish/identify the objectives you want to meet using community resources. You need to thoroughly analyze your subject areas and their relationship to career possibilities before setting up activities to meet those objectives. For that kind of planning help, no matter what grade level you teach, Subject Worksheets (described in the following pages) are included in The Community Resource Coordinator's Guide.

SUBJECT WORKSHEETS: ANALYZING A SUBJECT FOR CAREERS

Subject Worksheets are idea-starters for helping teachers think of career education activities and community resources in their subject areas. Each sheet--

- features one topical area (an example is given for mathematics on the next page) and suggests career ideas students might explore
- can be used at any grade level, in the primary grades as well as in secondary areas
- suggests typical community resources (people, places and organizations) that might be used in planning
- demonstrates how careers cut across all school disciplines
- allows freedom to work in new adaptations and create your own ideas

What Curriculum Areas are Covered by the Worksheets?

Individual worksheets are available from your Community Resource Coordinator in the following subject areas:

Agriculture	Economics	Literature
Art	Foreign Language	Mathematics
Behavioral Sciences	Geography	Music
Biology	Government	Office Occupations
Chemistry	Health	Physical Education
Distributive Education	History	Physics
Driver Training	Home Economics	Speech & Drama
Earth Sciences	Industrial Technology	Writing & Journalism

The subjects reflect what Washington elementary and secondary schools typically offer. This is a master set suitable for reproduction and includes one blank form which may be used for subject areas not addressed by these worksheets. Some teachers may want to use more than one subject worksheet. Elementary school people, for example, would likely want to explore the use of community resources for many subject areas. Secondary school teachers may be interested in developing relationships between several subject areas and a career.* The blank form can be used for inter-disciplinary activities.

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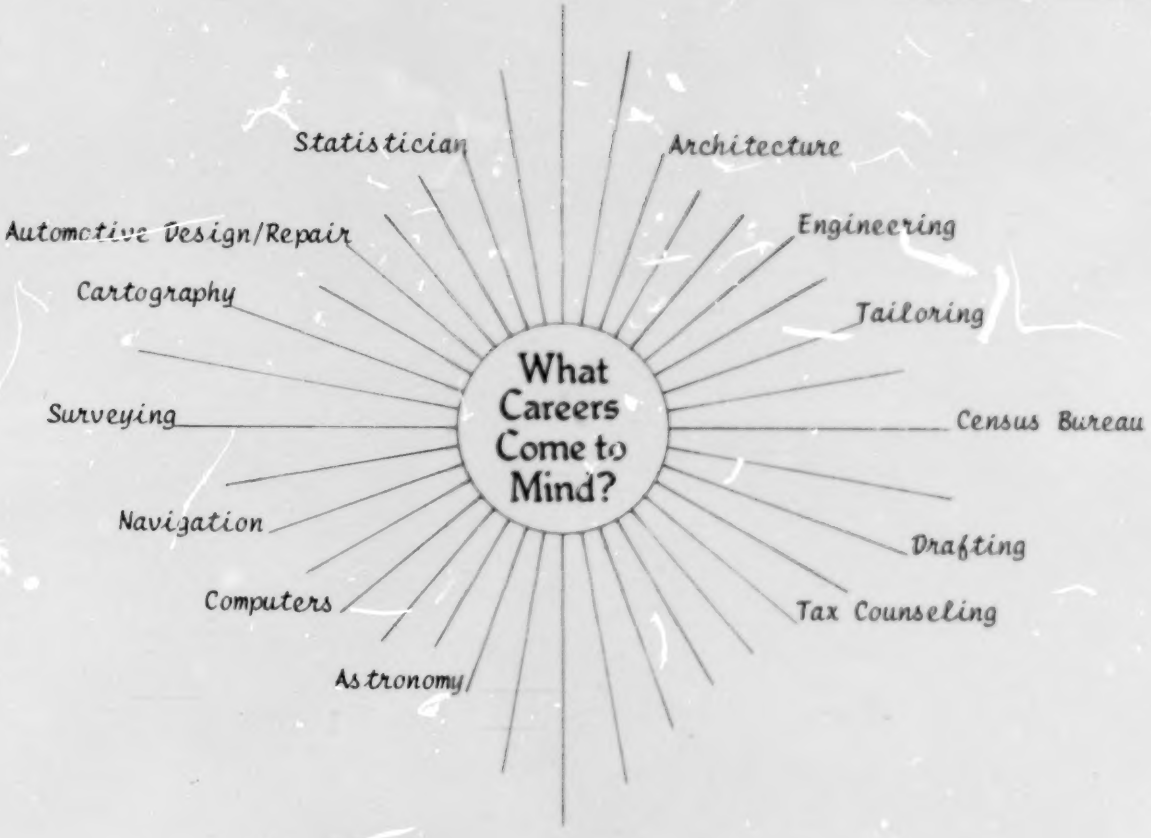
*The State of Washington is developing suggested teaching ideas for career education in individual subject areas. Contact Dr. Frank B. Brouillet, Superintendent of Public Instruction, Old Capitol Building, Olympia, Washington, 98504.



Look Around Your Community for MATHEMATICS **Skills at Work**

List occupations and sites in your community where this subject area is applied. Think about how you can use resource speakers and field trips. Make the list reflect the unique character of *your* community. (See the Teacher Guide for hints on how to make use of people and places.)

PLACES	*PEOPLE AT WORK*
Income tax service	Accountants
Landscape	Landscape architects
Banks	Tellers, loan officers
Stock brokerage	Accountants, stockbrokers
City planning office	Drafting personnel, statisticians
Clothing alterations shop	Bookkeeper
Cabinet shop	Carpenter, purchasing agent
House construction	Surveyor, engineer, carpenter

(continued on the next page)

More Places & People

(Use this space to add your own ideas)

Contact Organizations That Relate to This Subject

Here are examples of organizations that might help with career education activities in your subject area. Are these represented in your community? List any more you know. Fill out an Evergreen Resource Page for those you contact.

Washington Bankers Association
Washington Association of Accountants
Associate Credit Bureau of Washington, Inc.
Independent Insurance Agents & Brokers of Washington
Amateur Astronomers
Washington Credit Union League
Spokane Fuel Dealers Credit Association

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Don't Forget Leisuretime Activities That Apply MATHEMATICS **Skills!**

managing family budgets . . . measuring . . . planning trips . . . gas mileage . . . shopping . . . planning home building projects

DON'T FORGET:

Have you identified your objectives? How do they relate to your school or district's career education goals?

Bringing School & Community Resources Together

STUDENT ACTIVITIES	*OTHER SCHOOL RESOURCES (classes, people etc.)*	*COMMUNITY RESOURCES (people, places, materials)*
Survey the school		*Surveyor and equipment*
Design outside furniture for school grounds	*Carpentry class/teacher, mechanical drawing class/ teacher*	*Furniture designer, cabinet shop*
Analyze a day's traffic in the school (charts, statistics)	*School maintenance staff, floorplans of the school*	*Traffic engineer, statistician*
Analyze cost per student for cafeteria service	*Cafeteria supervisor, school purchasing agent or business manager, home economics classes/teachers*	*Food suppliers, supermarket or restaurant purchasing agents*

Don't stop here! Add more pages as you think of new ideas.

What Other School Subjects & Skills Are Important for People in MATHEMATICS ?

With your help, community resource people can identify the daily skills and knowledge they apply in their work. This grid shows how school learning can be related to careers. Go beyond generalities – find out what skill *levels* are needed, ask resource speakers to *show* the kinds of materials and tasks they encounter and to *specify how much* education/training they had (or wished they had) for each subject.

Don't stop with this sheet. Blank grids are available for reproduction. Fill in your own list of school subjects and skills. See the Teacher Guide for more ideas on analyzing jobs.

School Subjects and Skills	*(Occupation)* NAVIGATORS	*(Occupation)*
READING	Reads equipment manuals, weather reports	
MATHEMATICS	Computes time, distance, course alternatives	
COMMUNICATIONS (speech, writing)	Speaks clearly over radio, make and file reports	
SCIENCE	Uses astronomy, meteorology	
SOCIAL SCIENCE (history, economics, psychology, geography)	Needs geographical knowledge	
BUSINESS/OFFICE	Keeps records, charts course progress	
HEALTH/PE	Copes with transcontinental travel, etc.	
INDUSTRIAL TECHNOLOGY	Understands nautical equipment	
COPING SKILLS (decision making, responsibility, self-awareness)	Handles stress and responsibility for crew, passengers	
HUMANITIES (art, music, literature)	Design and drafting skills for navigation charts	

How Can the Worksheets be Used?

The worksheets can be used as part of a comprehensive approach to career education or by interested teachers working independently. These same sheets might also be given to students for individual or small group activities. Note that these worksheets are only partially completed. Teachers may start with these sample forms until they have a good feeling for how to proceed on their own. The blank copy provided with the Special Materials your coordinator has received may be reproduced and made available for teachers to work out their own ideas. Each section of the worksheet is described below.

WHAT CAREERS COME TO MIND . . .

Teachers might start by drawing a circle on the blackboard (like the sunburst display on the first page) as a springboard for classroom discussion of career possibilities relating to a particular subject. For each subject, sample careers are listed which by no means exhaust the career possibilities that might be listed for that area. Students could be encouraged to think about careers in classroom group discussions or evening assignments, to talk with their parents and neighbors, or do some library research. They should consider using this exercise with a community resource person (for instance, a personnel officer or employment counselor) to help give the discussion more reality.

LOOK AROUND YOUR COMMUNITY . . .

Following the display of careers, the worksheet provides space for listing actual people, places and organizations in your community that involve some use of that subject's content. There are several possibilities here. The teacher could--

- encourage students to use the phone book, look around their community and talk with parents and neighbors to come up with real examples of people and places related to the careers identified for the subject area they are studying. This helps bridge the gap between abstract printed occupational information and real life people and places where subject-related tasks are actually performed. Students begin to see that many occupations are "hidden"--by discovering, for instance, how a linguist's skills in foreign languages are employed by large banks for their international transactions.

- use the local Evergreen Pages directory for ideas on resources for career activities. If your school or district has established special procedures for utilizing community resources, these procedures should be followed.

DON'T FORGET LEISURETIME AND VOLUNTEER WORK ACTIVITIES . . .

An often overlooked aspect of career education relates to leisuretime and volunteer work activities. Teachers should think about their subject areas in terms of how knowledge and skills are applied in nonpaid situations. Looking at careers broadly as "how you choose to live your life," these activities are just as important as what we do to earn a living.

BRINGING SCHOOL AND COMMUNITY RESOURCES TOGETHER . . .

This portion of the worksheet has space for jotting down student activities that use school and community resources. Those suggested could be adapted for any grade level. The samples are centered around the subject area and assume that teachers will establish learning goals and performance criteria that meet the particular circumstances of each group (student age and abilities, course objectives and school career education goals).

The activities demonstrate ways in which students might take advantage of resources within their school--cooperation with other classes and school staff, use of school materials, shops and other physical resources. Looking at the school as a resource for classes helps build a spirit of cross-discipline cooperation. Not only do students benefit from shared knowledge and experiences regarding specific subject areas but they also gain practice in cooperation, group planning, problem solving and decision-making skills that are important for managing their own career development.

WHAT OTHER SCHOOL SUBJECTS AND SKILLS ARE IMPORTANT . . .

The grid on the last page of the worksheet helps students see how occupations often require the use of skills and knowledge from more than one subject area. Focusing on individual careers that relate to a subject area, the grid can be used for activities such as

- class discussion (preferably with resource people) of why it's important to learn in many different subjects
- identifying specific skill levels required for employment and performance in an occupation--through class discussion with a resource person representing a particular occupation or through small group or individual projects in which students research job requirements by interviewing resource people, going to sites and using library career information references

- developing "next step" learning plans with students that outline future education and training decisions they must make if they wish to aim for a certain occupation

To do an occupation justice, teachers will probably need more space than is provided in the sample grid appearing in the worksheet. The blank form in the Special Materials section includes a grid which leaves out subject listings (to be filled in) and provides space for two occupations to be explored. The form could be revised to work for only one occupation if desired.

The grid approach to analyzing careers can be used equally well as a blackboard exercise or as a student research assignment with a parent, or neighbor serving as a resource person.

ANALYZING CAREER AREAS

After looking at how many careers relate to the subject area(s) you teach, your students also need to put that information into the broader setting of today's working world.

Try analyzing a few careers related to your subject area using the methods presented below. Seeing familiar jobs in new contexts will help you expand your awareness of the kinds of career opportunities your students may someday choose.

As in any aspect of education, care must be exercised to avoid sex-role and ethnic stereotyping. Encourage your students and yourself to question assumptions about the appropriateness of certain skills, attitudes and areas of knowledge for different individuals to explore or acquire. Use the Evergreen Pages to help expand your awareness of the possibilities for growth and development available to everyone.

Four ways to analyze careers are suggested here. Regardless of which methods you choose to use, try to think in terms of function--what the person actually does--instead of labels.

(For the purpose of these examples, imagine that you teach a general science class where students become interested in X-rays, how they work, and how they are used.)

Option 1: Use a Career Cluster Approach

Grouping jobs into families is commonly done by organizing around subjects, generalizable skills or associated functions.

Example: *Health Services:* *doctor, nurse, nurse-practitioner, radiologist, anesthesiologist, medical records, orderly, receptionist, dentist*

The Health Services cluster would seem like a logical place to find X-ray technology at work, but it does overlook other ways of approaching the topic.

Option 2: Look at Products, Services, People and Functions

This method analyzes a career from the opposite direction. Take the object itself--in this case the X-ray machine--and list all the products, services, people and functions that relate to it.

Example: *X-ray machine:*

Uses	*Products required by it*
medical diagnosis	*photographic supplies*
therapy	*X-ray tables and equipment*
dental examination	*replacement parts*
	electrical support systems
industrial research	*protective devices*
structural analysis	*timing devices*
	dyes

Related Technology

fluoroscope

Direct functions	*Support functions*
X-ray technician	*doctor (to interpret results)*
repairperson	*office manager*
film developer	*bookkeeper*
	file clerk
radiologist	
dentist	
geologist	
technical researchers	
research physicist	
research chemist	

From these lists identify the functions and products which require a use of chemistry, physics, math, biology, astronomy and other areas you cover.

Option 3: Examine the Working Place

An X-ray machine company seems to be a logical place to find a resource person to discuss X-ray machines, but look what else it has to offer. Think of all the different functions this company requires to operate. Remember that while the same person may perform several different functions, each function requires skill development.

Example: X-ray machine manufacturing company

office manager
secretary
personnel director
file clerk
receptionist
bookkeeper
purchasing agent
sales agent
advertising agent
technical researchers
technical designers
tool and die makers
metal workers
plastic workers
supervisor
production line workers
packagers
truckers
warehouse workers
quality control checker
government inspector
custodian
electrical engineers
electrical technician

Option 4: Chart a Career Roadmap

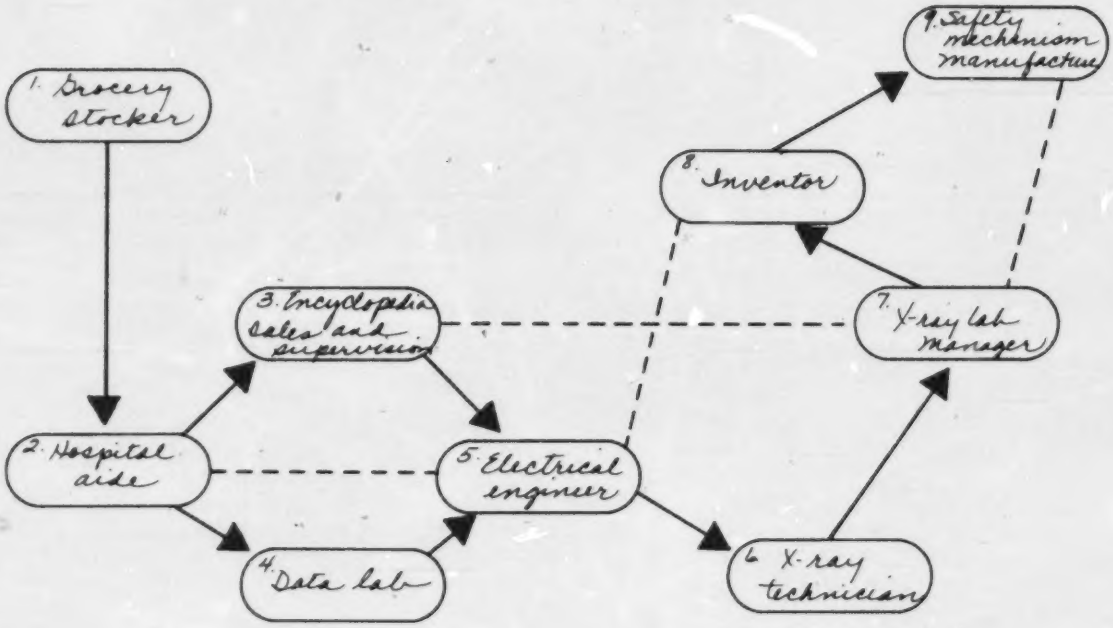
To illustrate how unpredictable--yet orderly--career development can sometimes be, draw a roadmap of your own career development on the blackboard (or ask a resource person to do this). Start with a list of all the jobs you've had (for pay or not), and draw heavy lines showing the chronological progression. Show dotted lines where the skills or interests you developed at one job were useful to you in another job. This diagram method is useful in talking with classes about 'careers' meaning what you do rather than a specifically labeled function.

Example: Safety Lock Manufacturer (who 'started out' in X-ray technology)

1. *grocery stocker*
2. *volunteer aide at hospital*
3. *encyclopedia sales; door-to door, then supervisor (during college summers)*
4. *physics lab data work (during college)*
5. *electrical engineer*
6. *X-ray technician*
7. *X-ray lab manager*
8. *inventor (of safety mechanism for X-ray dark room)*
9. *manufacturer of X-ray dark room safety mechanisms*

(Please turn the page for sample of a career roadmap.)

Sample Career Roadmap--



CONDUCTING AN ACTIVITY USING A COMMUNITY RESOURCE

Now that you have analyzed your subject area(s) and careers, you may be ready to plan the career education activity using a community resource which will accomplish the curriculum objectives you have in mind.

Remember to work closely with your Community Resource Coordinator. That person will have ideas and references which will support the plan you propose--field trips, informal classroom discussion, panel presentations, interviews, etc.

One question to keep uppermost in your mind: Is this activity--say, a field trip--the most appropriate way to deliver the experience my students need. Could the same objectives be met just as well another way?

Identify Your Goals and Objectives for a Specific Activity

Using community resources effectively requires forethought and preparation. If you have already experienced the benefits of involving community resources in your curriculum some of the suggestions that follow may sound familiar.

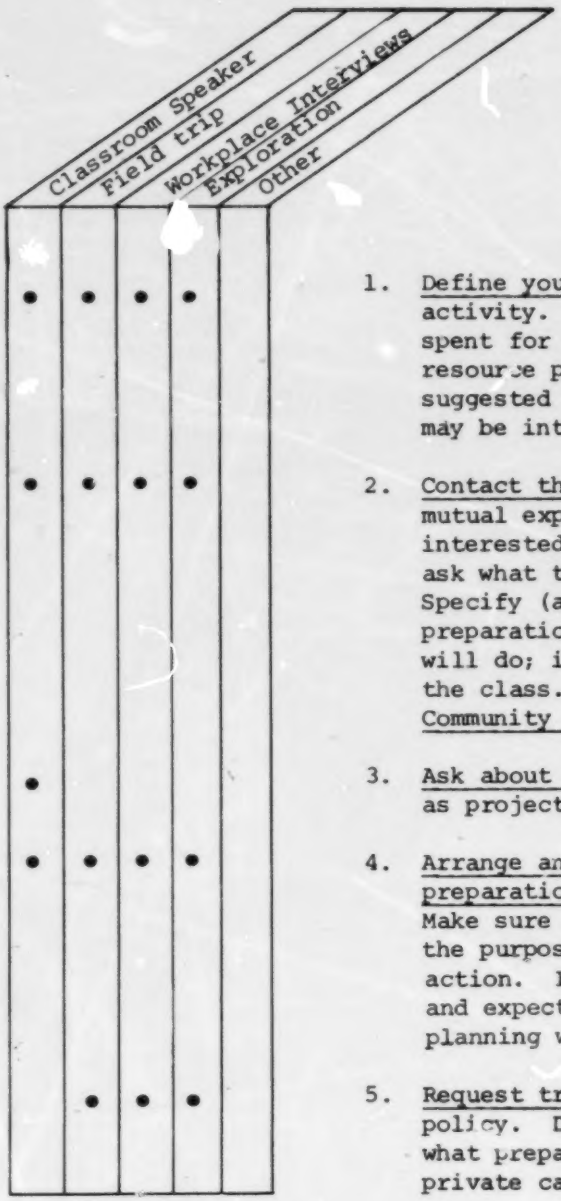
Here are some things to remember before going further:

- What is the educational merit of this activity?
- How can I relate this experience to the unit of study my students will be covering at that time?
- What will my students be most interested in learning from the resource person?
- What content do I expect the resource person to cover?
- Is there a resource person available for what I want? (Check your local directory or central file.) If not, how can I help find a resource?
- What school regulations and other activities should I coordinate with, know about, work within, consider?

Preparing for an Activity

Once you have decided to use a resource person, review the Community Resource Person's Guide. It will help you see what the community resource person already knows about his or her role and how you can make the activity go smoothly.

Consider the preparation suggestions that follow. These steps may need to be modified slightly depending on the particular event you are planning.



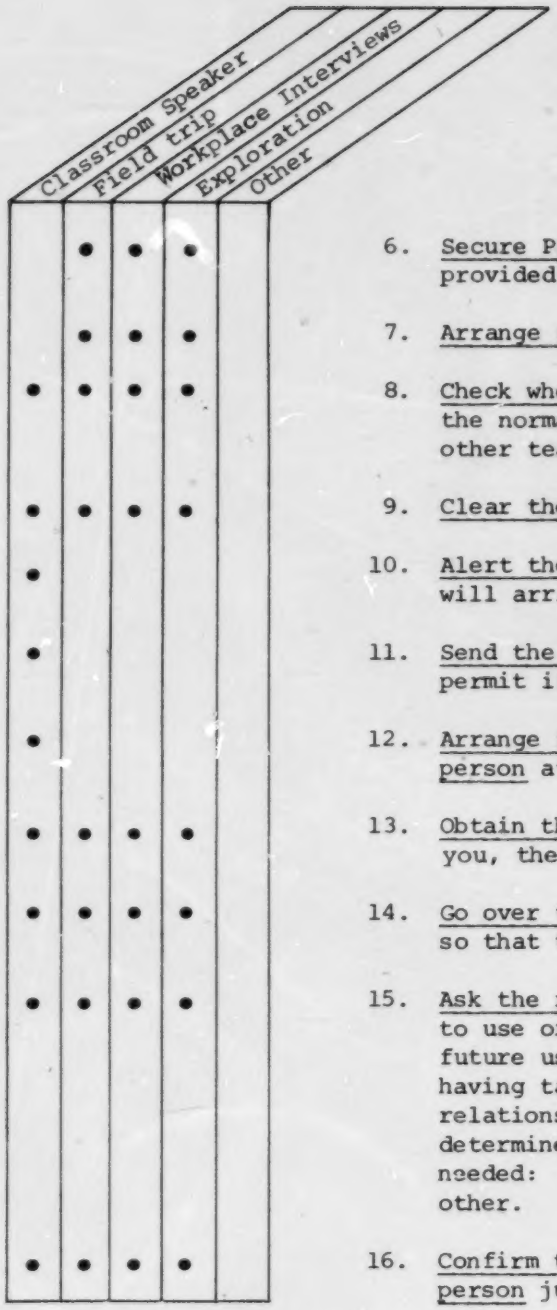
1. Define your goals and objectives for the activity. Be sure that the time will be well spent for you, for students, and for your resource person. Use student input for suggested activities, resource people they may be interested in.

2. Contact the resource person and discuss mutual expectations. Say what you're interested in having the resource person do; ask what they are interested in doing. Specify (and ask for input on) what preparation and follow-through the class will do; inform the resource person about the class. Also provide a copy of the Community Resource Person's Guide.

3. Ask about any special resources needed such as projectors, larger-than-classroom space....

4. Arrange and have students do necessary preparation (e.g., individual research). Make sure the class has a clear sense of the purpose of the resource person's interaction. Let class know what follow-up plans and expectations you have--involve them in planning whenever possible.

5. Request transportation according to district policy. Determine if buses will be needed; what preparation is necessary for using private cars.



6. Secure Parent Permission Slip (sample provided in Special Materials).

7. Arrange for volunteer helpers.

8. Check whether the event will conflict with the normal school schedule. If so, alert other teachers affected.

9. Clear the event with the administration.

10. Alert the office when the resource person will arrive.

11. Send the resource person a map and parking permit if necessary.

12. Arrange for students to meet the resource person at the office.

13. Obtain the necessary evaluation forms (for you, the students, the resource person).

14. Go over the evaluation form with the students so that they are aware of what to watch for.

15. Ask the resource person if it's permissible to use or mention their contribution for future uses (either for other classes through having taped the interaction, or for public relations purposes). If it is acceptable, determine if there are any special preparations needed: camera, videotape, tape recorder or other.

16. Confirm the date and time with the resource person just prior to the event.

During the Activity

Whether the activity is taking place within the school or at the work-place, your responsibility will be to work with the community resource person. Many resource people will be unfamiliar with speaking about their job or dealing with a group of young people. Keep alert for--

- awkward pauses--be ready with questions that can help the resource person discuss aspects of his or her job that haven't been covered yet or expand on points made (see the Community Resource Person's Guide for hints); have the students prepared with questions to ask.
- too much time left--have something in mind to do in case the resource person has trouble filling in the allotted time. Stimulating more questions and answers or discussing possible follow-through assignments with students and the resource person are ways to even out a potentially awkward situation.
- use of special equipment--be prepared with alternative material in case of equipment breakdown (i.e., movie projector, tape recorder)
- student reactions--student reactions during the activity will tell you a lot about the success of the event as well as providing clues for followup activities.

Remember to stay with your class the entire time (unless students are on individual activities or in several small groups). You are responsible for the activity.

After the Activity

Follow-through activities can range from a project directly using information gained in the event (e.g., making cheese after a visit to a cheese-maker's job site) to research leading to another event coming from a related but different approach (e.g., looking at the job of the State Health Inspector checking on sanitation standards for cheese production). Ask students for ideas. Check your Subject Worksheets.

Students

1. Fill out evaluation form on community resource person; return to teacher.
2. Send thank-you note from class.
3. Participate in follow-through activities.

Resource Person

1. Fill out evaluation form on experience; return to teacher.

Teacher

1. Fill out evaluation form, evaluating community resource person; send a copy to the coordinator.

2. Review student evaluation forms. Give feedback to class about their own evaluation as appropriate.

3. Review community resource person's evaluation form. Send a copy to the coordinator.

4. Enter visit in central resource file (your own file and in the central file).

5. Proceed with planned follow-through activities. (Stress doing rather than reading about doing whenever possible.)